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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,237	07/16/2003	Mike Brand	512425-2092	1290

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EXAMINER

BERMAN, SUSAN W

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/621,237

Applicant(s)

BRAND ET AL.

Examiner

Susan W Berman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/03</u> . | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 fails to use proper Markush language. It is suggested that “from the group of...” be replaced with “selected from the group consisting of phosphorus(III) compounds and sulfur compounds”.

Claims 2-5 are rendered indefinite by the use of the term “general” in “general formula”. It is not clear whether applicant intends to claim compound of the given formula or of some other formula of the same general nature. It is suggested that the claims should read “wherein the antioxidant is a compound of the formula...”. The definition of “R” as “aliphatic...heterocyclic radicals” fails to set forth that the radicals are hydrocarbyl radicals. Claims 2-5 recite “antioxidants”, however, claim 1 sets forth “at least one antioxidant”. It is suggested that the claims should read “wherein the antioxidant is a compound of the formula...”.

Claim 6 recites “antioxidants”, however, claim 1 sets forth “at least one antioxidant”. It is suggested that claim 6 should read “wherein the antioxidant is a compound which has...”.

Claim 7 recites “antioxidants”, however, claim 1 sets forth “at least one antioxidant”. It is suggested that claim 7 should read “wherein the antioxidant is a compound which is...”. Also, there is no antecedent basis in claim 1 for the recitation of a “silicone matrix” in claim 7. Claim 1 sets forth an organopolysiloxane having (meth)acrylate ester groups.

With respect to claims 11-14, it is not clear what “adhesive” the “adhesive coating composition” comprises. What is the chemical compositions of the “adhesive”? Is this a curable composition or a cured composition? Does applicant intend to claim a curable coating composition or a cured coating? With respect to claim 12, a radiation curable “composition” can be applied to an article but cannot form a

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“coating” on an article until it is radiation cured. The composition would necessarily be radiation cured in order to provide a “coating” on the “article”. The only disclosure the examiner has found is a coating composition comprising a mixture of two organopolysiloxane having (meth)acrylate ester groups,,,,,, one having a higher amount of double bonds than the other. If this is the composition applicant intends to claim, it should be so stated.

Claim 15 recites a “radiation curing paint” comprising a coating ‘composition”. It is not clear whether applicant intends to claim a paint obtained by curing the composition or a paint composition.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hosokawa et al (5,378,735).

Hosokawa et al disclose UV curing compositions comprising the (meth)acrylated organopolysiloxane reaction product of a silica dispersion, an acrylate-functional silane compound and, optionally, antioxidants of the phenolic series, sulfur series or phosphorus series. See Example 1, especially column 10, line 65, to column 11, line 2, and column 9, lines 44-54.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosokawa et al in view of Reid (5,420,208). Hosokawa et al disclose UV curing compositions comprising the (meth)acrylated organopolysiloxane reaction product of a silica dispersion, an acrylate-functional silane compound and, optionally, antioxidants of the phenolic series, sulfur series or phosphorus series. Hosokawa et al also disclose adding acrylic silicone resins having polyorganosiloxane units and trialkoxysilyl groups as a component E acrylic resin. The difference from the instantly claimed invention is that Hosokawa et al do not mention any specific antioxidant compounds.

Reid teaches that non acidic ester of phosphorus or sulfur, especially phosphite ester antioxidants, are curing catalysts for the moisture curing of silyl polymers carrying pendant trialkoxysilyl groups. See column 5, line 54, to column 8, line 5. The difference from the instantly claimed invention is that Reid does not teach that the antioxidants are curing catalysts for methacrylate-functional organopolysiloxanes.

It would have been obvious to one skilled in the art at the time of the invention to provide a composition comprising components A-E wherein E is an acrylic silicone resin as taught by Hosokawa et al. Motivation is provided by Hosokawa et al in Examples 9 and 10 wherein the acrylic silicone resin is added to components A-D. It would have been obvious to one skilled in the art at the time of the invention to employ a non acidic ester of phosphorus or sulfur antioxidant as curing catalyst in the compositions comprising an acrylic silicone resin disclosed by Hosokawa et al, as taught by Reid in analogous art compositions. Hosokawa et al provided motivation by teaching compositions comprising an acrylated siloxane and an acrylic silicone resin having silylalkoxy groups. Reid provides motivation by teaching that the phosphorus or sulfur esters, especially phosphite antioxidants, act as catalysts to cause crosslinking of silyl polymers carrying pendent trialkoxysilyl groups.

Claims 1 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto et al (5,712,221) in view of Hosokawa et al. Goto et al disclose a thermal recoding medium comprising a

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silicone resin having EB curable acrylate groups as the overlayer or protective layer having slip properties (column 15, lines 31-48). Goto et al also teach a binder resin that adheres to the substrate and thus can be considered to be 'adhesive' and an adhesive layer (column 9, lines 23-43, and column 11, lines 12-16). The EB curable silicone resin taught by Goto et al corresponds to the (meth)acrylated organopolysiloxane reaction product obtained by reaction of an isocyanato silane and a hydroxy-group containing methacrylate taught by Hosokawa et al. Hosokawa et al teach adding phosphorus series or sulfur series antioxidants to the disclosed acrylate-functional siloxane compositions. The difference from the instant claims is that Goto et al teach that antioxidants may be added, but do not mention any specific antioxidants.

It would have been obvious to one skilled in the art at the time of the invention to employ phosphorus series or sulfur series antioxidants, as taught by Hosokawa et al, in the analogous acrylate-functional silicone resins used to provide a protective coating having slip properties as overlayer to a binder colorant layer having adhesive properties on a substrate, as taught by Goto et al. Goto et al provide motivation by teaching that antioxidants may be added. Hosokawa et al provide motivation by teaching that sulfur series and phosphorus series antioxidants are useful in coating films comprising acrylate-functional siloxanes.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/685141. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of SN '141 encompass compositions comprising an antioxidant, as is set forth in claim 10, which recites stabilizers and other customary additives. The claims read in view of the disclosure of SN '141 encompass stabilizers and antioxidants, such as phosphites, that scavenge oxygen or are able to break down peroxides. It is further noted that the photoinitiator set forth in the claims of SN '141 is encompassed by the recitation of an optional photoinitiator in the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kidon et al (5,543,231) disclose radiation curable silicone release compositions for producing release coated substrates utilizing a layer of pressure sensitive adhesive, wherein the psa composition can contain an antioxidant (columns 8-9). The release compositions can be stabilized with conventional polymerization inhibitors 9column 6, lines 51-57).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Susan W Berman
Primary Examiner
Art Unit 1711

SB
2/3/05